

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a LED TV with 2.4GHz wireless transmission function operating in 2409-2413MHz. It is powered by AC100-240V, 50/60Hz. For more detailed features description, please refer to the user's manual.

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 0 dBi)

The nominal radiated output power (e.i.r.p) specified: 5dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: 5dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 100.2dBμV/m at 3m in the frequency 2.413GHz = $[(FS \cdot D)^2 / 30]$ mW
= 5.0dBm which is within the production variation

The minimum radiated emission for the EUT is 98.9dBμV/m for at 3m in the frequency 2.409GHz = $[(FS \cdot D)^2 / 30]$ mW
= 3.7dBm which is within the production variation.

The maximum conducted output power specified is 8dBm = 6.3mW

The source-based time-averaging conducted output power
= 6.3 * Duty cycle mW ≤ 6.3 mW (Duty Cycle ≤ 100%)

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt(2.480) mW
= 9.5 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.